Table 4. CaM and CML binding proteins identified on protein microarrays.

| AT# | Description | CaM1 | CaM6 | CaM7 | CML8 | CML9 | CML10 | CML12 | BtCaM # of hits |
|------------------------|--|--------|--------|--------|------|------|--------|-------|---|
| AT3G12250 | bZIP transcription factor family (TGA6) | X | | | | | | | 1 |
| AT3G44200 | Protein kinase family protein | X | | | | | | | 1 |
| AT4G23290 | Protein kinase of unknown function | X | | | | | | | 1 |
| AT5G23170 | Receptor-like kinase Crinkly 4 Like Kinase | X | | | | | | | 1 |
| AT5G46590 | No apical meristem (NAM) protein | X | | | | | | | 1 |
| AT5G63770 | Protein of unknown function (DUF567) | X | | | | | | | 1 |
| AT1G67530 | Armadillo/beta-catenin repeat family | | X | | | | | | 1 |
| AT3G06030 | MAPKKK12; NPK1-related protein kinase 3 | | X | 37 | | | | | 1 |
| AT1G06910 | MYB family transcription factor,TRF-like7 | | | X | | | | | 1 |
| AT1G48150 AT2G30590 | MADS-box family protein WRKY Transcription Factor; (WRKY21) | | | X X | | | | | 1 1 |
| AT3G26170 | Cytochrome P450 71B19, putative | | | X | | | | | 1 |
| AT4G39950 | Cytochrome P450 79B2, putative | | | X | | | | | 1 |
| AT5G06500 | MADS-box family protein | | | X | | | | | 1 |
| AT5G06560 | Protein of unknown function (DUF593) | | | X | | | | | 1 |
| AT5G26950 | MADS-box family protein | | | X | | | | | 1 |
| AT1G51170 | Protein kinase family protein | | | | X | | | | 1 |
| AT2G03710 | MADS-box family protein (AGL3) | | | | X | | | | 1 |
| AT3G17240 | Dihydrolipoamide dehydrogenase 2 | | | | X | | | | 1 |
| AT4G21470 | Riboflavin kinase/FAD synthetase family | | | | X | | | | 1 |
| AT5G08141 | bZIP transcription factor family | | | | X | | | | 1 |
| AT5G38740 | MADS-box family protein | | | | X | | | | 1 |
| AT1G18890 | Ca2+dependent protein kinase 1 (CDPK1) | | | | | X | | | 1 |
| AT1G65300 | MADS-box family protein (AGL38) | | | | | X | | | 1 |
| AT1G76270 | Expressed protein | | | | | X | | | 1 |
| AT5G64780 | Expressed protein | | | | | X | v | | 1 1 |
| AT5G10030 AT5G37670 | bZIP transcription factor family (TGA4) Heat shock protein Hsp20/alpha crystallin | | | | | | X X | | 1 |
| AT1G11270 | F-box family protein | | | | | | Λ | X | 1 |
| AT1G21550 | Ca2+-binding protein, putative | | | | | | | X | 1 |
| AT1G27690 | Protein of unknown function (DUF620) | | | | | | | X | 1 |
| AT1G29340 | E3 ubiquitin ligase | | | | | | | X | 1 |
| AT1G74490 | Receptor Like Cytoplasmic Kinase | | | | | | | X | 1 |
| AT3G12720 | MYB family transcription factor | | | | | | | X | 1 |
| AT3G18980 | F-box family protein | | | | | | | X | 1 |
| AT4G31950 | Cytochrome P450 family protein | | | | | | | X | 1 |
| AT5G02500 | HSP70-1 | | | | | | | X | 1 |
| AT5G56580 | MAPKK6 | | | | | | | X | 1 |
| AT5G58380 | CBL-interacting protein kinase 10 (CIPK10) | | | | | | | X | 1 |
| AT3G57730 | Wall Associated Kinase | | | | | | | | X 1 |
| AT3G63260 | MRK1(related to mixed-lineage kinases) CDK-activating kinase assembly factor-related | | | | | | | | X 1 X 1 |
| AT4G30820 AT4G36730 | bZIP; G-box binding factor 1 (GBF1) | | | | | | | | X 1 X 1 |
| AT5G26170 | WRKY Transcription Factor; (WRKY50) | | | | | | | | X 1 |
| AT1G10210 | MAPK1 | X | | | | | | | X 2 |
| AT1G69270 | Protein kinase (SIK1) | X | | | | | | | X 2 |
| AT5G26870 | MADS-box family protein | X | | | | | | | X 2 |
| AT2G26730 | Receptor-like Leucine Rich Repeat Kinase | X | | X | | | | | X 2 2 |
| AT5G55690 | MADS-box family protein | X | | | | X | | | 2 |
| AT2G02800 | Receptor Like Cytoplasmic Kinase (APK2b) | X | | | | X | | | 2 |
| AT2G43850 | Ankyrin protein kinase, putative (APK1) | X | | | | X | | | 2 |
| AT1G75100 | Similarity to Hs Cyclin G-associated kinase | X | | | | | X | | 2 |
| AT3G30530 | bZIP transcription factor family | | | X | | | X | | 2 |
| AT2G39660 | Receptor Like Cytoplasmic Kinase VII | | | | X | | | • • | 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |
| AT1G60920 | MADS-box family protein | | | | X | | | X | 2 |
| AT5G40540 | Protein kinase, putative, similar to ATN1 | | | | X | 37 | | X | 2 |
| AT5G11620 | MAPKKK | | | | | X | | X | 2 V 2 |
| AT1G34300 | Lectin protein kinase family protein S Domain | v | v | v | | | | X | X 2 3 |
| AT4G18630 | Protein of unknown function (DUF688) | X | X X | X | | v | | | 3 |
| AT4G26270 | Phosphofructokinase family protein | X | Λ | v | | X | | | 3 X 3 |
| AT4G28706 AT3G12350 | PfkB-type carbohydrate kinase family protein F-box family protein similar to SKP2 | X X | | X X | | | X | | X 3 3 |
| AT4G16410 | Protein of unknown function (DUF751) | X | | X | | | X | | 3 |
| AT5G64400 | Protein of unknown function (DUF-751) | X | | X | | | X | | 3 |
| 7113GU44UU | 1 1000m of unknown function (DOF037) | 1 | | 1 | | | Λ | | J |

| AT3G04100 | MADS-box family protein | X | | X | | X | | | | 3 |
|------------|---|---|----|----|----|----|----|----|----|---|
| AT4G23050 | MAPKKK delta-1 protein kinase, putative | X | | | | X | | | X | 3 |
| AT1G07530 | Scarecrow-like transcription factor (SCL14) | X | | | | | | X | X | 3 |
| | <u> </u> | | | | | | | | | |
| AT1G09840 | Shaggy-related protein kinase beta (ASK10) | X | | | | | | X | X | 3 |
| AT3G22750 | MRK1, similar | | X | X | | X | | | | 3 |
| AT4G18650 | bZIP transcription factor family (TGA2.1) | | X | X | | X | | | | 3 |
| | | | 21 | | 37 | 21 | | 37 | | |
| AT3G15010 | RNA recognition motif -containing protein | | | X | X | | | X | | 3 |
| AT3G05050 | CDC2 Like Kinase Family | | | X | X | X | | | | 3 |
| AT3G20080 | Cytochrome P450 family protein | | | X | | X | | X | | 3 |
| | | | | | v | | | X | | 3 |
| AT1G20950 | Pyrophosphate-fructose-6-P 1-Ptransferase | | | | X | X | | Λ | | |
| AT3G04430 | No apical meristem (NAM) protein | X | | X | | X | | | X | 4 |
| AT3G13320 | Cation Exchanger 5 (CAX5) | X | | X | | | X | X | | 4 |
| AT2G24540 | F-box family protein similar to SKP4 | X | | X | | X | X | | | 4 |
| | | | | 71 | 37 | Λ | Λ | 37 | 37 | |
| AT5G60910 | MADS-box family protein (AGL8) | X | | | X | | | X | X | 4 |
| AT1G14370 | Receptor Like Cytoplasmic Kinase (APK2a) | X | X | X | | X | X | | | 5 |
| AT1G80120 | Protein of unknown function (DUF567) | X | X | X | | X | X | | | 5 |
| AT2G20110 | Tesmin/TSO1-like CXC domain-containing | X | X | X | | X | X | | | 5 |
| | | | | | | | | | | |
| AT3G01970 | WRKY Transcription Factor; (WRKY45) | X | X | X | | X | X | | | 5 |
| AT3G30260 | MADS-box family protein | X | X | X | | X | X | | | 5 |
| AT3G61880 | Cytochrome P450, putative | X | X | X | | X | X | | | 5 |
| | | | | | | | | | | - |
| AT4G37940 | MADS-box family protein | X | X | X | | X | X | | | 5 |
| AT5G24080 | S Domain Kinase (Type 2) | X | X | X | | X | X | | | 5 |
| AT5G24800 | bZIP transcription factor family (BZO2H2) | X | X | X | | X | X | | | 5 |
| | | | | | | | | | | _ |
| AT5G47810 | Phosphofructokinase family protein | X | X | X | | X | X | | | 5 |
| AT5G66770 | Scarecrow transcription factor (SCL4) | X | X | X | | X | X | | | 5 |
| AT2G04890 | Scarecrow-like transcription factor (SCL21) | X | X | X | | X | | X | | 5 |
| AT5G41920 | Scarecrow transcription factor (SCL23) | X | | X | | X | | X | X | 5 |
| | 1 , | | | | | | ** | Λ | | |
| AT5G13790 | MADS-box family protein | X | | X | | X | X | | X | 5 |
| AT1G28390 | Receptor-like kinase Crinkly 4 Like Kinase | X | X | X | X | X | X | | | 6 |
| AT5G01890 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | | | 6 |
| | | | | | 71 | | | 37 | | |
| AT1G68380 | Protein of unknown function (DUF266) | X | X | X | | X | X | X | | 6 |
| AT3G62420 | bZIP transcription factor family protein | X | X | X | | X | X | X | | 6 |
| AT1G12680 | Ca2+-dependent protein kinase, putative | X | X | X | | X | X | | X | 6 |
| AT1G27190 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | | X | X | | X | 6 |
| | • | | | | | | | | | |
| AT1G53510 | MAPK19 | X | X | X | | X | X | | X | 6 |
| AT1G68400 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | | X | X | | X | 6 |
| AT3G02880 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | | X | X | | X | 6 |
| | | | | | | | | | | |
| AT3G19100 | Ca ²⁺ dependent kinase, similar to NtCaMK3 | X | X | X | | X | X | | X | 6 |
| AT4G26070 | MAPKK1 | X | X | X | | X | X | | X | 6 |
| AT4G30960 | CBL-interacting protein kinase 6 (CIPK6) | X | X | X | | X | X | | X | 6 |
| AT4G37870 | Phosphoenolpyruvate carboxykinase, putative | X | X | X | | X | X | | X | 6 |
| | | | | | | | | | | |
| AT5G23260 | MADS-box family protein | X | X | X | | X | X | | X | 6 |
| AT5G27050 | MADS-box family protein | X | X | X | | X | X | | X | 6 |
| AT5G40120 | MADS-box family protein (AGL76) | X | X | X | | X | X | | X | 6 |
| | | | | | | | | | | |
| AT5G41200 | MADS-box family protein | X | X | X | | X | X | | X | 6 |
| AT5G49450 | bZIP transcription factor family | X | X | | X | X | X | X | | 6 |
| AT1G08320 | bZIP transcription factor family | X | X | X | X | X | X | X | | 7 |
| AT1G59530 | bZIP transcription factor family | X | X | X | X | X | X | X | | 7 |
| | 1 | | | | | | | | | |
| AT2G28380 | dsRNA-binding domain-containing protein | X | X | X | X | X | X | X | | 7 |
| AT2G46130 | WRKY Transcription Factor; (WRKY43) | X | X | X | X | X | X | X | | 7 |
| AT3G58120 | bZIP transcription factor family | X | X | X | X | X | X | X | | 7 |
| | 1 | X | X | X | | | X | | | 7 |
| AT4G39540 | Shikimate kinase family protein | | | | X | X | | X | | |
| AT5G10520 | Receptor Like Cytoplasmic Kinase | X | X | X | X | X | X | X | | 7 |
| AT5G38800 | bZIP transcription factor family | X | X | X | X | X | X | X | | 7 |
| AT5G39670 | Ca2+binding EF hand family protein | X | X | X | X | X | X | X | | 7 |
| | | | | | | | | | | |
| AT5G49490 | MADS-box family protein | X | X | X | X | X | X | X | | 7 |
| AT5G53450 | Protein kinase family protein | X | X | X | X | X | X | X | | 7 |
| AT2G48010 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | | X | 7 |
| | | X | X | X | X | X | X | | X | 7 |
| AT3G20110 | Cytochrome P450 family protein | | | | | | | | | |
| AT3G23310 | Protein kinase family protein | X | X | X | X | X | X | | X | 7 |
| AT3G50310 | MAPKKK20 | X | X | X | X | X | X | | X | 7 |
| AT1G22070 | bZIP transcription factor family (TGA3) | X | X | X | | X | X | X | X | 7 |
| | | | | | | | | | | |
| AT1G60040 | MADS-box family protein | X | X | X | | X | X | X | X | 7 |
| AT3G61160 | Shaggy-related protein kinase beta (ASK2) | X | X | | X | X | X | X | X | 7 |
| AT5G56890 | Protein kinase family protein | | X | X | X | X | X | X | X | 7 |
| AT1G20930 | CDC2 Like Kinase Family (CDKB2;2) | X | X | X | X | X | X | X | X | 8 |
| | | | | | | | | | | |
| AT1G54610 | CDC2 Like Kinase, similar to BvCRK1 | X | X | X | X | X | X | X | X | 8 |
| AT1G56145 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | X | X | 8 |
| AT1G58110 | bZIP transcription factor family | X | X | X | X | X | X | X | X | 8 |
| AT1G74740 | Ca2+dependent kinase, putative (CDPK30) | X | X | X | X | X | X | X | X | 8 |
| | Caz-rucpendent Kinase, butative (CDFK30) | Λ | Λ | Λ | Λ | Λ | Λ | Λ | Λ | 0 |
| 1111074740 | '1 '1 ' | | | | | | | | | |

| AT1G77145 AT2G23080 | Protein of unknown function (DUF506) Casein kinase II alpha chain, putative | X X | 8 8 |
|------------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| AT2G23080 AT2G23290 | MYB family transcription factor (MYB70) | X | X | X | X | X | X X | X | X | 8 |
| AT2G23290 AT2G24840 | MADS-box family protein | X | X | X | X | X | X | X | X | 8 |
| AT2G30980 | Shaggy-related protein kinase delta (ASK4) | X | X | X | X | X | X | X | X | 8 |
| AT2G30980 AT2G31180 | MYB family transcription factor (MYB14) | X | X | X | X | X | X | X | X | 8 |
| AT3G12200 | Protein kinase family protein | X | X | X | X | X | X | X | X | 8 |
| AT3G12200 AT3G17600 | AUX/IAA transcription factor family (IAA31) | X | X | X | X | X | X | X | X | 8 |
| AT3G17000 AT3G19290 | bZIP transcription factor family (ABF2) | X | X | X | X | X | X | X | X | 8 |
| AT3G28450 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | X | X | 8 |
| AT3G56270 | Protein of unknown function (DUF827) | X | X | X | X | X | X | X | X | 8 |
| AT3G58780 | MADS-box family protein (AGL1) (SHP1) | X | X | X | X | X | X | X | X | 8 |
| AT3G59150 | Cyclin-like F-box family protein | X | X | X | X | X | X | X | X | 8 |
| AT4G02410 | Lectin protein kinase family protein | X | X | X | X | X | X | X | X | 8 |
| AT4G02410 AT4G02640 | bZIP transcription factor family (BZO2H1) | X | X | X | X | X | X | X | X | 8 |
| AT4G02040 AT4G04570 | Protein of unknown function (DUF26) kinase | X | X | X | X | X | X | X | X | 8 |
| AT4G04370 AT4G08980 | F-box family protein (FBW2) | X | X | X | X | X | X | X | X | 8 |
| AT4G13020 | Protein kinase (MHK) | X | X | X | X | X | X | X | X | 8 |
| AT4G13020 AT4G14340 | Casein kinase I (CKI1), | X | X | X | X | X | X | X | X | 8 |
| AT4G14340 AT4G17080 | Phosphatidylinositol-4-phosphate 5-kinase | X | X | X | X | X | X | X | X | 8 |
| AT4G17080 AT4G18950 | Ankyrin protein kinase, putative | X | X | X | X | X | X | X | X | 8 |
| AT4G23170 | Receptor Like Cytoplasmic Kinase | X | X | X | X | X | X | X | X | 8 |
| AT4G23170 AT4G23650 | Ca2+dependent kinase, putative (CDPK6) | X | X | X | X | X | X | X | X | 8 |
| AT4G23810 | WRKY Transcription Factor; (WRKY53) | X | X | X | X | X | X | X | X | 8 |
| AT4G23810 AT4G24390 | F-box family protein (FBX14) | X | X | X | X | X | X | X | X | 8 |
| AT4G24390 AT4G34380 | Similar to Myosin heavy chain kinase B | X | X | X | X | X | X | X | X | 8 |
| AT4G34380 AT4G35600 | Protein kinase, Gap junction homologue | X | X | X | X | X | X | X | X | 8 |
| AT4G35600 AT4G36250 | Aldehyde dehydrogenase family protein | X | X | X | X | X | X | X | X | 8 |
| AT4G30230 | MYB family transcription factor | X | X | X | X | X | X | X | X | 8 |
| AT5G15830 | bZIP transcription factor family | X | X | X | X | X | X | X | X | 8 |
| AT5G13830 AT5G20810 | Auxin-responsive protein, putative (SAUR_B) | X | X | X | X | X | X | X | X | 8 |
| AT5G27070 | MADS-box family protein (AGL53) | X | X | X | X | X | X | X | X | 8 |
| AT5G27070 AT5G35410 | CBL-interacting protein kinase 24 (CIPK24) | X | X | X | X | X | X | X | X | 8 |
| AT5G33410 AT5G39810 | MADS-box family protein | X | X | X | X | X | X | X | X | 8 |
| AT5G39810 AT5G48670 | MADS-box family protein | X | X | X | X | X | X | X | X | 8 |
| AT5G49760 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | X | X | 8 |
| AT5G56030 | Heat shock protein 81-2 (HSP81-2) | X | X | X | X | X | X | X | X | 8 |
| AT5G56040 | Receptor-like Leucine Rich Repeat Kinase | X | X | X | X | X | X | X | X | 8 |
| AT5G566790 | Wall Associated Kinase-like Kinase | X | X | X | X | X | X | X | X | 8 |
| TOTAL | wan associated Kinase-like Kinase | 122 | 99 | 117 | 77 | 113 | 102 | 86 | 84 | 0 |
| TOTAL | | 122 | " | 11/ | ,, | 113 | 102 | 90 | 04 | |

X interactions found on the protein microarray analyses